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## ABSTRACT OF THE DISCLOSURE

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There is provided a method of driving an image sensor which can remove FPN resulting from inter-chip variations without requiring any dark correction. A semiconductor photosensor chip has a plurality of sensor modules mounted on a mounting substrate, and a semiconductor device in which at least an N signal input buffer circuit for receiving N signals, an S signal input buffer circuit for receiving S signals, a differential circuit for calculating any difference between the outputs from the N and S signal input buffer circuits, and a voltage clamping circuit for clamping the output from the differential circuit are formed on a single semiconductor substrate, and the voltage clamping circuit clamps the reset state of S and N signal common output line.